CLAIMS

1. An optical lens including

an optically clear lens element; and

an asymmetric reflectance, light absorbing coating including at least four overlapping light absorbing and generally transparent layers, and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the optical lens; and

wherein the asymmetric reflectance, light absorbing coating includes alternating layers of a dielectric material and a metallic material which is a metal or metal nitride;

2. An optical lens according to Claim 1, wherein

the dielectric material is selected from one or more of SiO, SiO_2, ZrO_2, Al_2O_3, TiO, TiO_2, Ti_2O_3, Y_2O_3, Yb_2O_3, MgO, Ta_2O_5, CeO_2 and HfO_2, MgF_2, AlF_3, BaF_2, CaF_2, Na_3AlF_6, Ta_2O_5 and $Na_5Al_3Fl_{14}$, and Si_3N_4 and AlN; and

the metallic material is selected from the metals, or metal nitrides of one or more of Niobium (Nb), Chromium (Cr), Tungsten (W), Tantalum (Ta), Tin (Sn), Palladium (Pd), Nickel (Ni) or Titanium (Ti).

3. An optical lens according to Claim 1, wherein the asymmetric reflectance, light absorbing coating further includes compatible dielectric layers of suitable thickness to provide a desired colour to the optical lens.

4. An optical lens according to Claim 1, wherein the asymmetric reflectance, light absorbing coating further includes a compatible dielectric top layer to enhance abrasion resistance.

5. An optical lens including

an optically clear lens element; and

an asymmetric reflectance, light absorbing coating including at least four alternating layers of silica (SiO2) and chromium (Cr) or Niobium (Nb) metal; and wherein the thickness and/or number of the respective layers are selected to

provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the optical lens.

6. An optical lens according to Claim 5, wherein the asymmetric reflectance, light absorbing coating includes an additional titanium dioxide layer or layers of such a thickness to provide a desired colour to the optical lens.

7. An optical lens according to Claim 5, wherein the asymmetric reflectance, light absorbing coating includes alternating layers of silica and niobium metal and an additional niobium oxide (Nb_2O_5) and/or silica (SiO_2) layer of such thicknesses to provide a desired colour to the optical lens.

8. An optical lens according to Claim 1, wherein a surface of the lens is subjected to a surface treatment.

9. An optical lens according to Claim 8, wherein the surface treatment improves adhesion thereto.

10. An optical lens according to Claim 9, wherein a surface is subjected to a plasma treatment.

11. An optical lens according to Claim 9, wherein an adhesion promoting coating is applied to a surface.

12. An optical lens according to Claim 1, wherein the optically clear lens element is a laminate optical lens.

13. A multi-coated optical lens including

an optically clear lens element;

an asymmetric reflectance, light absorbing coating including a plurality of overlapping light absorbing and generally transparent layers, and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the lens;

wherein the asymmetric reflectance, light absorbing coating includes alternating layers of a dielectric material and a metallic material which is a metal or metal nitride;

an optically clear secondary coating which provides a desirable optical and/or mechanical property to the optical lens.

14. A multi-coated optical lens according to Claim 13, wherein

the dielectric material is selected from one or more of SiO, SiO_2, ZrO_2, Al_2O_3, TiO, TiO_2, Ti_2O_3, Y_2O_3, Yb_2O_3, MgO, Ta_2O_5, CeO_2 and HfO_2, MgF_2, AlF_3, BaF_2, CaF_2, Na_3AlF_6, Ta_2O_5 and $Na_5Al_3Fl_{14}$, and Si_3N_4 and AlN; and

the metallic material is selected from the metals or metal nitrides of one or more of Niobium (Nb), Chromium (Cr), Tungsten (W), Tantalum (Ta), Tin (Sn), Palladium (Pd), Nickel (Ni) or Titanium (Ti).

15. A multi-coated optical lens according to claim 14, wherein the asymmetric reflectance, light absorbing coating further includes compatible dielectric layers of suitable thickness to provide a desired colour to the optical lens.

16. A multi-coated optical lens according to claim 14, wherein the asymmetric reflectance, light absorbing coating further includes a compatible dielectric top layer to enhance abrasion resistance.

17. A multi-coated optical lens according to Claim 13, wherein the secondary coating is an abrasion-resistant coating applied to the front surface or eye side surface of the optical lens.

18. A multi-coated optical lens according to Claim 13, wherein the optically clear secondary coating is an anti-reflective coating applied to the front surface or eye side surface of the optical lens.

19. A multi-coated optical lens according to Claim 18, further including an abrasion-resistant coating supporting the anti-reflective coating.

20. A multi-coated optical lens according to Claim 19, wherein the abrasion-

resistant coating includes an organo-silicone resin.

21. An optical lens element including

a lens wafer having

a first lens surface; and

a second lens surface,

the first or second surface having deposited thereon

an asymmetric reflectance, light absorbing coating including at least four overlapping light absorbing and generally transparent layers, and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the optical lens when formed as a laminate optical lens; and

wherein the asymmetric reflectance, light absorbing coating includes alternating layers of a dielectric material and a metallic material which is a metal or metal nitride.

22. An optical lens element according to Claim 21 wherein

the dielectric material is selected from one or more of SiO, SiO_2, ZrO_2, Al_2O_3, TiO, TiO_2, Ti_2O_3, Y_2O_3, Yb_2O_3, MgO, Ta_2O_5, CeO_2 and HfO_2, MgF_2, AlF_3, BaF_2, CaF_2, Na_3AlF_6, Ta_2O_5 and $Na_5Al_3Fl_{14}$, and Si_3N_4 and AlN; and

the metallic material is selected from the metals or metal nitrides of one or more of Niobium (Nb), Chromium (Cr), Tungsten (W), Tantalum (Ta), Tin (Sn), Palladium (Pd), Nickel (Ni) or Titanium (Ti).

23. An optical lens element according to Claim 21, wherein the lens wafer is a front lens wafer and the asymmetric reflectance light absorbing coating is deposited on the concave surface of the front lens wafer.

24. An optical lens element according to Claim 21 wherein the lens wafer is a back lens wafer and the asymmetric reflectance light absorbing coating is deposited on the convex surface of the back lens wafer.

25. An optical lens element according to Claim 21, wherein the lens wafer is a back lens wafer and the asymmetric reflectance light absorbing coating is

deposited on the concave surface of the back lens wafer.

26. An optical lens element according to Claim 21, wherein the lens wafer is a front lens wafer and the asymmetric reflectance light absorbing coating is deposited on the convex surface of the front lens wafer.

27. A laminate optical lens including

a front lens wafer including

a contact surface;

a complementary back lens wafer including

a contact surface; and

an asymmetric reflectance, light absorbing coating deposited on a contact surface, which light absorbing coating includes at least four overlapping light absorbing and generally transparent layers, and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the optical lens; and

wherein the asymmetric reflectance, light absorbing coating includes alternating layers of a dielectric material and a metallic material which is a metal or metal nitride.

28. A laminate optical lens according to Claim 27, wherein

the dielectric material is selected from one or more of SiO, SiO_2, ZrO_2, Al_2O_3, TiO, TiO_2, Ti_2O_3, Y_2O_3, Yb_2O_3, MgO, Ta_2O_5, CeO_2 and HfO_2, MgF_2, AlF_3, BaF_2, CaF_2, Na_3AlF_6, Ta_2O_5 and $Na_5Al_3Fl_{14}$, and Si_3N_4 and AlN; and

the metallic material is selected from the metals, or metal nitrides of one or more of Niobium (Nb), Chromium (Cr), Tungsten (W), Tantalum (Ta), Tin (Sn), Palladium (Pd), Nickel (Ni) or Titanium (Ti).

29. A laminate optical lens according to Claim 27, wherein a contact surface of the front and/or back lens wafer bears a mark thereon, the mark not being visible from the eye side of the laminate lens.

30. A laminate optical lens according to Claim 29, wherein the mark on the

contact surface is visible from the front surface of the laminate lens.

31. An optical lens element according to Claim 27, wherein the light absorbing coating is deposited on a contact surface and includes a silica top layer, the silica top layer bearing a mark visible prior to lamination.

32. An optical lens element according to Claim 31 wherein the visible mark is etched into the silica top layer.

33. An optical lens element according to Claim 32, wherein the visible mark is rendered substantially invisible from the eye side of the laminate lens when the lens wafer is bonded to its complementary wafer with a laminate adhesive having a refractive index approximately equal to that of the silica layer.

34. An optical lens element according to Claim 31 wherein the visible mark is deposited on the silica top layer, the visible mark being formed from a laminate adhesive or polymeric material having a refractive index approximately equal to that of the silica layer.

35. An optical lens element according to Claim 34, wherein the visible mark is rendered substantially invisible from the eye side of the laminate lens when the lens wafer is bonded to its complementary wafer with a laminate adhesive having a refractive index approximately equal to that of the silica layer.

36. A method for preparing an optical lens, including

an optically clear lens element; and

an asymmetric reflectance, light absorbing coating including at least four overlapping light absorbing and generally transparent layers, and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the optical lens; and

wherein the asymmetric reflectance, light absorbing coating includes alternating layers of a dielectric material and a metallic material which is a metal or metal nitride;

which method includes

providing

an optically clear lens element,

a dielectric material; and

a metallic material;

depositing at least four overlapping layers of dielectric material and metallic material on a surface of the optical lens element, the number and/or thickness of the respective layers being selected to provide an asymmetric reflectance, light absorbing coating.

37. A method according to Claim 36, wherein

the dielectric material is selected from one or more of SiO, SiO_2, ZrO_2, Al_2O_3, TiO, TiO_2, Ti_2O_3, Y_2O_3, Yb_2O_3, MgO, Ta_2O_5, CeO_2 and HfO_2, MgF_2, AlF_3, BaF_2, CaF_2, Na_3AlF_6, Ta_2O_5 and $Na_5Al_3Fl_{14}$, and Si_3N_4 and AlN; and

the metallic material is selected from the metals, or metal nitrides of one or more of Niobium (Nb), Chromium (Cr), Tungsten (W), Tantalum (Ta), Tin (Sn), Palladium (Pd), Nickel (Ni) or Titanium (Ti);

38. A method according to Claim 36, wherein the deposition step is a vacuum deposition step and is conducted in a box coater or sputter coating apparatus.

39. A method according to Claim 36, wherein the optically clear lens element includes

a front lens wafer including

a contact surface,

a complementary back lens wafer, including

a contact surface

and the overlapping layers of dielectric material and metallic material are deposited on a surface of the front and/or complementary back lens wafer.

40. A method according to Claim 39, wherein the overlapping layers of dielectric material and metallic material are deposited on a contact surface of the front or complementary back lens wafer.

41. A method according to Claim 39, wherein a laminate adhesive is applied to one or both contact surfaces, the front lens wafer and back lens wafer being brought into contact and the laminate so formed being subjected to a curing step to form a laminate optical lens.

42. A method according to claim 41, wherein the contact surface bearing the light absorbing coating bears a visible mark thereon;

the laminate adhesive having a similar refractive index to the silica layer such that, when the laminate is bonded, the mark on the contact surface becomes substantially invisible to the wearer.

43. A method according to Claim 41, wherein the top layer of the light absorbing coating is a silica layer bearing a visible mark thereon;

the laminate adhesive having a similar refractive index to the silica layer such that, when the laminate is bonded, the mark on the silica surface becomes substantially invisible to the wearer.

44. An optical lens according to Claim 1, substantially as hereinbefore described with reference to any one of the examples.